Evaluation of Newborn Screening Test for Critical Congenital Heart Disease (Cchd) in a Private Medical Center in Mexico and its Implications for being at 2550 Meters above Sea Level

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Pulse oximetry screening test (POT) has been shown to be useful for in early detection of critical congenital heart disease (CCHD). The precise oxygen saturation expected at altitudes above 1500 meters above sea level is unknown, and its usefulness in children born above this height is also unknown.

The target is to describe the results obtained from the POT in 100 apparently healthy newborns in a private hospital at 2550 meters above sea level where most of them were evaluated by one or more fetal-stage ultrasounds for the detection of CCHD among other things. Sex, resuscitation and weeks of gestation did not alter the results.

95 patients had "normal" prenatal ultrasound, of which 32% tested positive POT, and CCHD was also ruled out after clinical follow-up. It was concluded that all the patients with a positive test were healthy. We suggest possibility of modifying the POT parameters in order to avoid false positives is also discussed.